

What is claimed is:

1. A diagnostic imaging apparatus comprising:

a position-of-interest determination unit which determines a plurality of positions in a plurality of images of a predetermined part of an object which are taken during movement of the predetermined part, to be positions of interest in the plurality of images, where the plurality of positions in the plurality of images correspond to a predetermined position in the predetermined part; and

a characteristic-quantity calculation unit which calculates a characteristic quantity indicating a positional relationship between the positions of interest in the plurality of images.

2. A diagnostic imaging apparatus according to claim 1, further comprising an automatic diagnosis unit which outputs information on said predetermined part of said object, based on said characteristic quantity.

3. A diagnostic imaging apparatus according to claim 1, wherein said predetermined part is a joint of a human body.

4. A diagnostic imaging apparatus according to claim 2, wherein said predetermined part is a joint of a human body.

5. A diagnostic imaging apparatus according to claim 1, wherein said plurality of images are a plurality of radiographic images which are taken by applying radiation to said predetermined part during the movement of the predetermined part.

6. A diagnostic imaging apparatus according to claim 4,

wherein a marker is attached to said predetermined part, said plurality of images are a plurality of radiographic images, and said position-of-interest determination unit determines positions of images of said marker to be said positions of interest, where said
5 images of the marker are respectively formed in said plurality of radiographic images by radiation which has passed through the marker.

7. A diagnostic imaging apparatus according to claim 5, wherein said plurality of radiographic images are taken by using a solid-state radiation detector which generates and stores electric
10 charges when the solid-state radiation detector is irradiated with radiation.

8. A diagnostic imaging apparatus according to claim 6, wherein said plurality of radiographic images are taken by using a solid-state radiation detector which generates and stores electric
15 charges when the solid-state radiation detector is irradiated with radiation.